

REMARKS

Claims 1, 3-6, 8-20 and 24-27 are pending in the application. Claim 27 is added herein. Favorable reconsideration of the application is respectfully requested.

I. REJECTION OF CLAIMS 1, 3-6, 8-10, 15-17, 19, 20 AND 24 UNDER 35 USC §103(a)

Claims 1, 3-6, 8-10, 15-17, 19, 20 and 24 remain rejected under 35 USC §103(a) based on *Acosta et al.* in view of *Sasaki et al.* Applicants must again respectfully request withdrawal of this rejection for at least the following additional reasons.

Applicants note initially that it is improper to combine references where the references teach away from their combination. (See, e.g., MPEP §2145(X)(D)(2)). As is stated in *In re Grasselli*, 713 F.2d, 731, 743 (Fed. Cir. 1983), it is improper to combine references in the case where the references teach away from the proposed combination.

Acosta et al. and *Sasaki et al.* teach away from each other, and hence are not properly combinable.

In particular, *Sasaki et al.* discloses that normally, to control alignment of the liquid crystal, the alignment layers are rubbed. However, since rubbing is required, it is necessary to carry out cleaning to clean the substrates formed having the alignment layers after rubbing. *As a result, the fabrication of the liquid crystal panel is comparatively troublesome and the substrates may be polluted during the rubbing.* (See, e.g., Col. 1, Ins. 37-53 of *Sasaki et al.*).

Thereafter, *Sasaki et al.* discusses a liquid crystal display apparatus of a vertical alignment type having alignment control structures that is capable of controlling alignment of the liquid crystal *without rubbing*. In particular, such liquid crystal display

apparatus has the advantages that no rubbing is required, wide visual field angle and high contrast. More specifically, the reliability of the liquid crystal display apparatus is improved because there can be no pollution on the substrates which otherwise might occur at the time of rubbing. (See, e.g., Col. 2, Ins. 7-26). *Sasaki et al.* goes on to disclose that the objective of the invention in *Sasaki et al.* is to provide a liquid crystal display apparatus of a vertical alignment type (i.e., no rubbing required) which has improved brightness and response. (See, e.g., Col. 2, Ins. 29-32).

In contrast, *Acosta et al.* teaches that the alignment layers (13, 2) are rubbed. (See, e.g., [0064] and [0066]). Applicants acknowledge that *Acosta et al.* discloses a portion of the alignment layer 12 masked by the patterned photoresist remains unrubbed as noted by the Examiner. However, the alignment layer 12 is still rubbed as shown clearly in Fig. 6d. In addition, the polyimide layer 2 deposited on the glass substrate 1 is also uniformly rubbed. In particular, *Acosta et al.* discloses that it would be necessary for the alignment layers on both the upper and lower substrates to be selectively rubbed to create regions of high pre-tilt and regions of low pre-tilt. (See, e.g., [0080]).

Therefore, the invention as disclosed in *Sasaki et al.*, which does not require rubbing at all and emphasizes the undesirability of rubbing the alignment layers, teaches directly away from the apparatus described in *Acosta et al.* which requires the alignment layers to be rubbed.

The references, i.e., *Sasaki et al.* and *Acosta et al.*, must be considered as a whole. It is well established that it is impermissible to pick and choose only so much as will support a given position to the exclusion of other parts necessary to the full appreciation of what such references fairly teach or suggest. (See, e.g., *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)).

Accordingly, the teachings of the references, when considered *in toto*, teach directly away from the combination proposed by the Examiner. One having ordinary skill in the art, with the knowledge of such teachings, would not be prompted to combine

the references in the manner proposed by the Examiner as it would be contrary to the teachings of the references which describe the non-desirability of such a combination.

For at least the above reasons, applicants wish to reemphasize that the invention of claims 1, 3-6, 8-10, 15-17, 19, 20 and 24 would not have been obvious. Applicants respectfully request withdrawal of the rejection.

II. REJECTIONS OF CLAIMS 11-14, 18, 25 AND 26 UNDER 35 USC §103(a)

Claims 12-14, 25 and 26 stand rejected under 35 USC §103(a) based on *Acosta et al.* in view of *Sasaki et al.*, and further in view of *Funada et al.* Claims 11 and 18 stand rejected under 35 USC §103(a) based on *Acosta et al.* in view of *Sasaki et al.*, and further in view of *Ulrich et al.* Withdrawal of these rejections is respectfully requested for at least the following reasons.

Claims 11-14, 18, 25 and 26 each depend from claim 1 either directly or indirectly, and can be distinguished over *Acosta et al.* and *Sasaki et al.* for at least the same reasons. Moreover, neither *Ulrich et al.* nor *Funada et al.* makes up for the above-discussed deficiencies in *Acosta et al.* and *Sasaki et al.* Thus, withdrawal of the rejections is respectfully requested.

III. NEW CLAIM 27

New claim 27 specifically recites the feature of at least a portion of the alignment layer is rubbed, which is directly contrary to the teachings of *Sasaki et al.* Thus, new claim 27 should also be allowable for at least the above reasons.

IV. CONCLUSION

Accordingly, all claims are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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